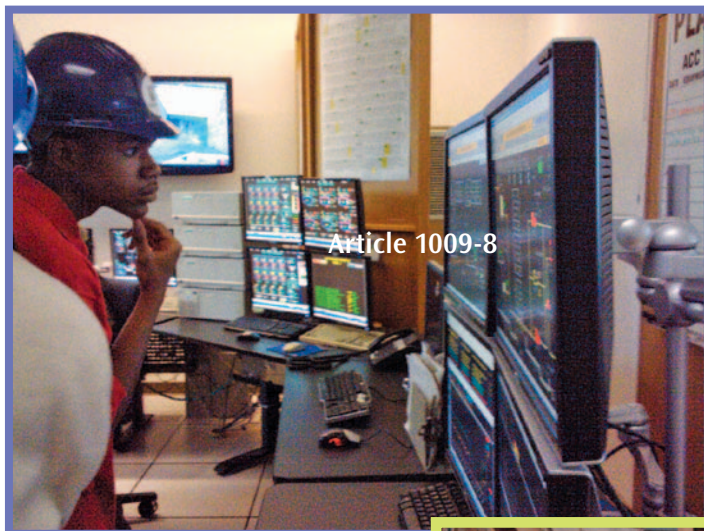


South Wastewater Treatment Plant

By Jonathon Laws



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Have you ever wondered what happens after you flush the toilet? Do you really know what happens to toilet water? Did you know that the average person in Washington State uses and average of about 90 gallons of water per day! Well, I am here to tell you about the South Wastewater Treatment Plant in Renton, where I recently took a tour, and it really sparked my interest.

In 1958, King County voters created the Municipality of Metropolitan Seattle (METRO) to provide wastewater treatment services and to clean the waters of Lake Washington and Elliott Bay. By 1965, South Plant started operations as a secondary treatment facility. South Plant operates 24 hours a day, 365 day a year. Nearly 130 trained professionals, which include operators, lab technicians, maintenance employees, process control personnel and administrative staff work there.

At South Treatment Plant, the focus is to remove specific wastes that are in the water. Those wastes consist of bacteria, trash, chemicals and organic wastes. When the water leaves the plant and is released into the Puget Sound, it is 85 percent cleaner than when it entered the plant. The South Treatment Plant is lo-

cated on 94 acres of land in Renton. The plant serves more than 1.4 million people and has a 420-square-mile service area.

The plant's wastewater treatment facilities produce many valuable resources that can be used within the plant and throughout the region. Three main resources are produced at the plant. They are reclaimed water, biosolids and energy recovery. Reclaimed water is used for cleaning and as a water source for the treatment plant. Then even more water undergoes further treatment for irrigation and industrial use by businesses, parks and nurseries near the treatment plant.

Biosolids are produced in digester tanks, which like the human body, are heated up to around 98 degrees Fahrenheit and has a floating lid (roof). Some of the plant's biosolids are sold as a soil amendment for agriculture in eastern Washington. The rest is used in forest fertilization or composted for use in landscaping and gardening. Digester gas is a by-product of the biosolids digestion process. It is a gas composed of methane and carbon dioxide produced by active anaerobic bacteria. After being cleaned, this gas is sold to Puget Sound Energy and used on-site as an energy source.



The South Treatment Plant has consistently been recognized by the National Association of Clean Water Agencies for excellence in wastewater treatment.

For more information on South Plant and wastewater treatment go to on a tour or see the King County web pages at: <http://www.kingcounty.gov/environment/wtd/About/System/South.aspx>.

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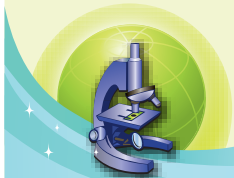
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